

Revised & Reviewed  
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# OSPE Revision

Main text

**Red : important**

**Pink : in girls slides only**

**Blue : in boys slides only**

**Green : doctors notes**

**Grey : extra info**



**MED441**  
KING SAUD UNIVERSITY

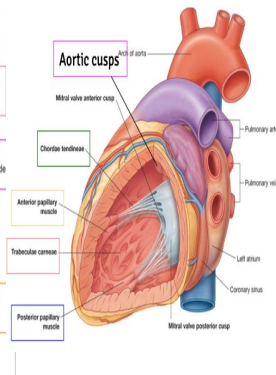
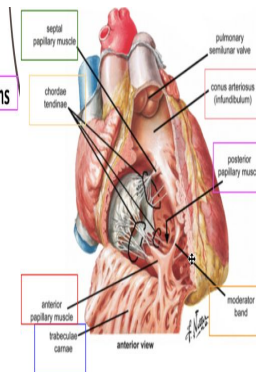
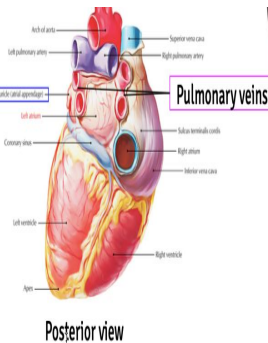
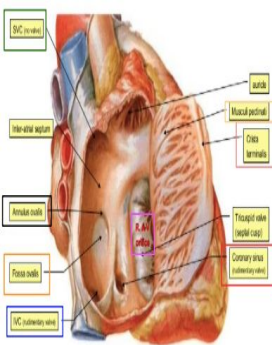


Editing File

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# Chambers of the heart

	Right Atrium	Left Atrium	Right ventricle	Left Ventricle
structure	<p><b>Crista terminalis</b></p> <p><b>Muscle pectinati</b></p> <p><b>Fossa ovalis</b></p> <p><b>Annulus ovalis</b></p> <p><b>*Openings:</b>  <b>AV orifice</b>  <b>SVC &amp; IVC openings</b>  <b>Coronary sinus opening</b></p>	<p><b>Left auricle</b></p> <p><b>Pulmonary veins</b></p> <p><b>*Openings:</b>  <b>AV orifice</b></p>	<p><b>1-papillary muscles :</b>  <b>-anterior</b>  <b>-posterior</b>  <b>-septal</b>  <b>-moderator band</b></p> <p><b>2-Trabecule carnae</b></p> <p><b>3-Infundibulum</b></p> <p><b>4-Chordae tendineae</b></p> <p><b>5-Tricuspid valve</b></p> <p><b>6-Pulmonary trunk</b></p>	<p><b>Aortic cusps</b></p> <p><b>Chordae tendineae</b></p> <p><b>Posterior papillary muscle</b></p> <p><b>Trabeculae carnae</b></p> <p><b>Anterior papillary muscle</b></p>



# Blood Supply of the heart

grooves of the heart

## Atrioventricular

1-Left atrioventricular groove “Sulcus”  
(Continuation of coronary groove)  
Separates left atrium from left ventricle

**It contains:**

- 1- Coronary sinus
- 2- Circumflex artery

2-Right atrioventricular Groove “sulcus”  
(Aka. Coronary groove) Separates right atrium from right ventricle

**Structures passing through:**

- Right Ventricle
- Right coronary artery

## Interventricular

Posterior Interventricular Groove

Separates right ventricle from left ventricle posteriorly

**Structures passing through:**

- 1- Posterior interventricular artery
- 2- Middle cardiac vein

2-Anterior

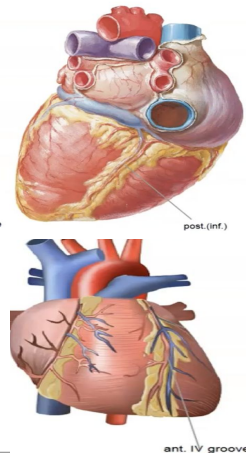
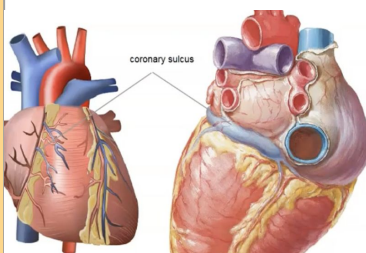
Interventricular Groove

Separates right ventricle from left ventricle anteriorly

**Structures passing through:**

- 1- Anterior interventricular artery (branch of left coronary)
- 2- Great cardiac vein

pictures



# Blood Supply of the heart

vessels of the heart

## Arteries

1-Right coronary artery :

**-origin:**

Anterior aortic sinus of the ascending aorta

**-branches:**

- 1.Right posterior descending artery (RPD)
- 2.Right acute marginal Artery (AM)

2-Left coronary artery

**origin :**

Left lateral aortic sinus of the ascending aorta

**branches:**

- 1.Left anterior descending artery
- 2.Circumflex artery (CX)

## Veins

**Venous drainage:**

Coronary sinus

Great cardiac vein

Small cardiac vein.

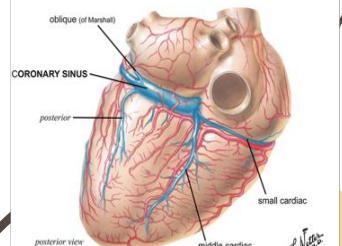
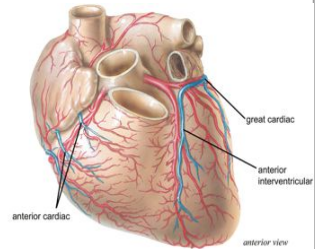
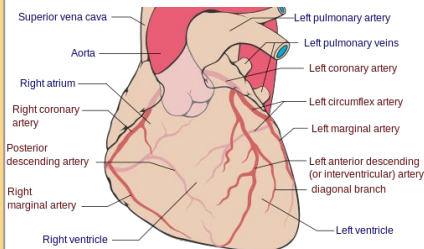
Middle cardiac vein.

Oblique vein of lt. atrium

Anterior cardiac veins

Venae cordis minimi

pictures



# Great Arteries Attached To The Heart

Major Artery	Branches	pictures
Arch Of Aorta	1-Brachiocephalic trunk (Right): A. right subclavian B. common carotid 2-Left coronary carotid artery 3-Left subclavian artery	
Ascending Aorta	1- <u>R</u> ight coronary artery arises from right aortic sinus 2- <u>L</u> eft coronary artery arises from left posterior aortic sinus	
Descending thoracic aorta	1-bronchial 2-esophageal 3-posterior intercostal 4-pericardial	
Carotids arteries	1- external carotid artery : A- scalp B-face C-tongue D- pharynx E- thyroid gland  2-internal carotid artery : A- nose B- scalp C- eye D- brain	
Abdominal aorta	1- <u>s</u> ingle branches : A-coeliac B-superior & inferior mesenteric C- median sacral  2- <u>p</u> aired branches : A- inferior phrenic B-middle suprarenal C-renal D-gonadal E-4 pairs of lumbar arteries F- common iliac	
common iliac artery	1- external iliac artery : continue as femoral artery 2- internal iliac artery : supply : pelvis	
upper limb arteries	subclavian: vertebral artery & internal thoracic artery => axillary =>brachial =>ulnar & radial	
lower limb arteries	femoral artery => popliteal artery => *anterior tibial artery : dorsalis pedis *posterior tibial artery : lateral & medial plantar arteries	

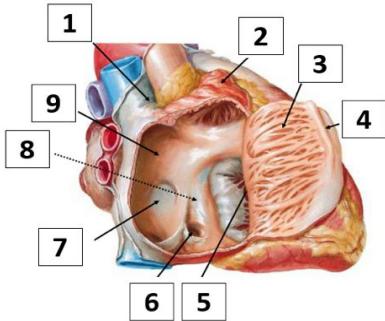




# Practice Questions:



## Identify the labelled structures:



1- SVC

2- Right auricle

3- Musculi Pectinati

4- Crista Terminalis.

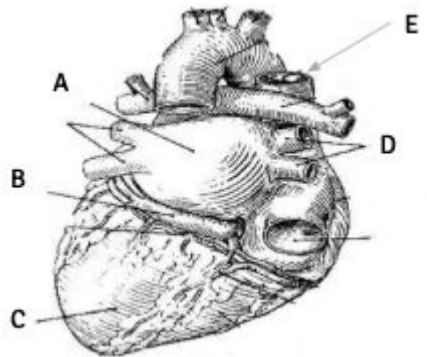
5- Right A-V opening. (Tricuspid valve)

6- Opening of coronary sinus.

7- Foramen ovale.

8- Coronary sinus (from interior).

9- Sinus venarum.



A : left atrium.

B : coronary sinus.

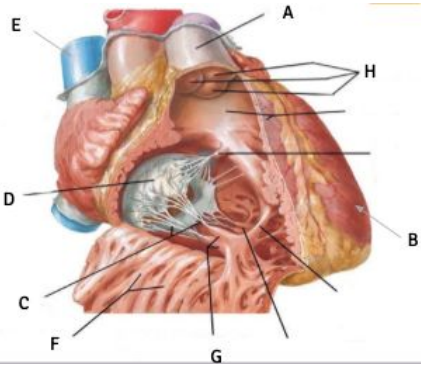
C : left ventricle.

D : pulmonary veins

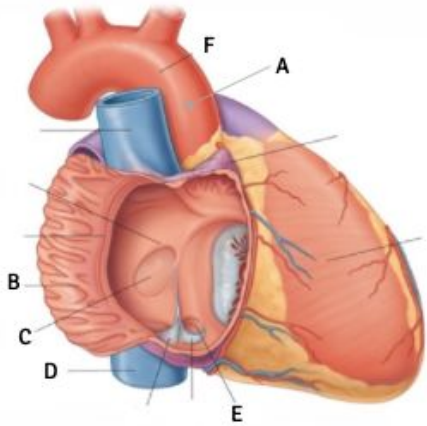
E : Superior vena cava.



## Identify the labelled structures:

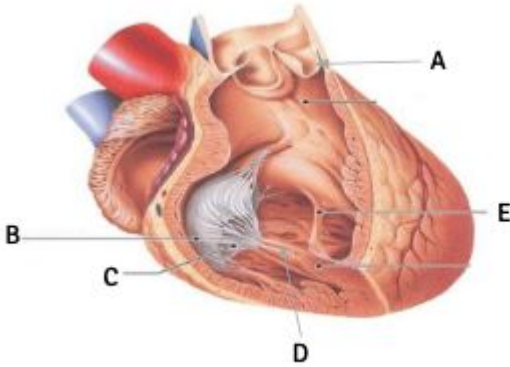


- a. Pulmonary trunk.
- b. Left ventricle.
- c. Tendinous cords (chordae tendineae)
- d. Tricuspid valve (right atrioventricular valve).
- e. S.V.C
- f. Trabeculae carneae.
- g. Anterior papillary muscles.
- h. Pulmonary valve.

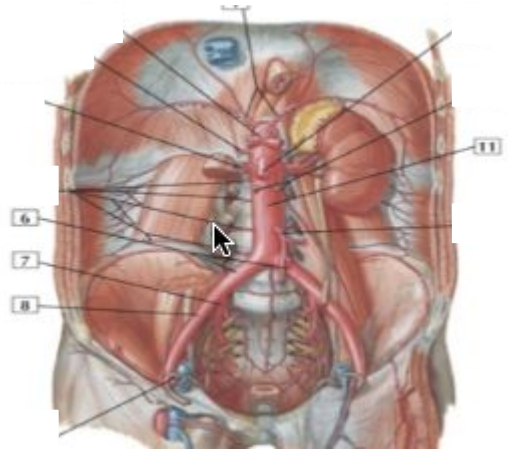


- A : Ascending aorta.
- B : musculi pectinati (pectinate muscles) of right atrium.
- C : fossa ovalis.
- D : I.V.C
- E : opening of coronary sinus.
- F : Arch of aorta.

## Identify the labelled structures:

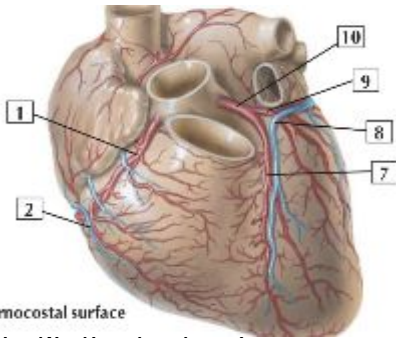


- a. Pulmonary valve.
- b. Tricuspid valve (right atrioventricular valve).
- c. Chordae tendineae (tendinous cords).
- d. Anterior papillary muscle.
- e. Moderate band (Septomarginal trabecula).



- 6. Common iliac arteries
- 7. Internal iliac artery
- 8. External iliac artery
- 11. Abdominal aorta

# Identify the labelled structures:



Sternocostal surface

Identify the structure 1:

Right coronary artery

What is the origin of ( 1 )?

Anterior aortic sinus of the ascending aorta

What are the main branches of ( 1 )?

1. Posterior interventricular artery
2. Acute marginal artery

Identify the structure 10::

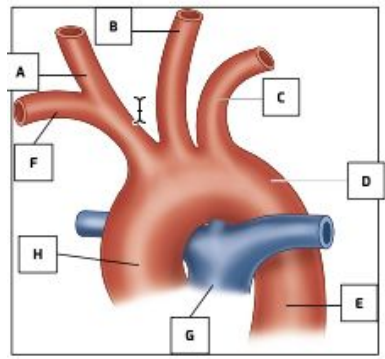
Left coronary artery

What is the origin of ( 10 )?

Left posterior aortic sinus of the ascending aorta

What are the main branches of ( 10 )?

1. Anterior interventricular artery
2. Circumflex artery
3. Left marginal artery



Identify A:

Right common carotid artery

Identify B

Left common carotid artery

Identify C:

Left subclavian artery

Identify D:

Aortic arch

Identify E:

Descending aorta

Identify F:

Right subclavian artery

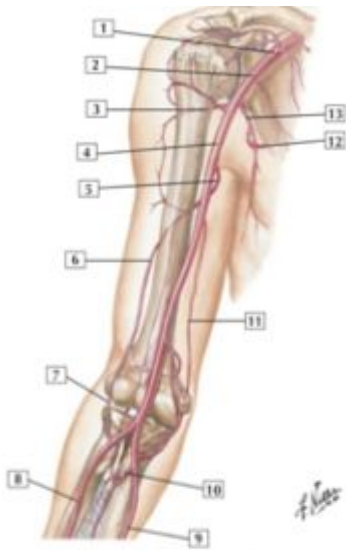
Identify G:

Pulmonary trunk

Identify H:

Ascending aorta

# Identify the labelled structures:



Identify 2:

Axillary artery

Identify 4:

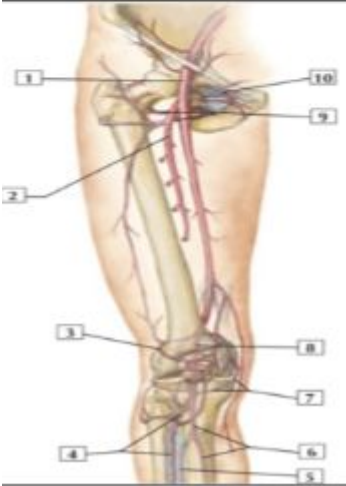
Brachial artery

Identify 8:

Radial artery

Identify 9:

Ulnar artery



Identify 1:

Femoral artery

Identify 4:

Anterior tibial artery

Identify 6:

Posterior tibial artery

Identify 8:

Popliteal artery

# Thanks!

Team leader

لمياء السند



ألاء المعجل  
شوق الهذال  
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Team leader

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